



# Linking COVID-19 Response to Climate Action

Morgenstadt Global Smart Cities Initiative, 1st Webinar, 29.01.2021

Moderation: Sophie Mok, Fraunhofer IAO



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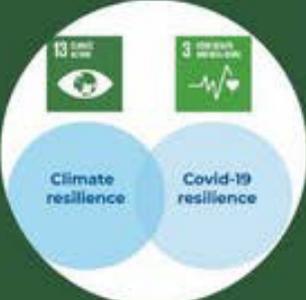
# Linking COVID-19 Response to Climate Action - Agenda

## PART I

**OPENING AND SUMMARY OF SESSION RESULTS**  
Dr. Markus Schwegler, University of Stuttgart  
Sophie Mok, Fraunhofer IAO



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**HOW CAN CLIMATE RESILIENCE HELP COVID-19 RESILIENCE?**  
Gaetan Hinojosa, South Pole

.....

**SOCIAL DISTANCE INDEX - BASED ON AI/ML ANALYSIS OF PEDESTRIAN FREQUENCY**  
Jens-Peter Seick, Fraunhofer IOSB-INA



## PART II



**PIURA, TACNA AND IQUIQUE. COVID-19 ADAPTATION STRATEGIES IN PUBLIC SPACES**  
Stella Schroeder, Universidad de Piura

.....

**STUTTART'S SHOPPING BUDDIES - BOTTOM-UP COMMUNITY SUPPORT INITIATIVES DURING THE PANDEMIC**  
Laura Rathjen, Global Shapers Stuttgart



.....



**INFORMAL DISCUSSION ROUND**



**mgi** MORGENSTADT GLOBAL  
SMART CITIES INITIATIVE  
GLOBAL APPROACH – LOCAL SOLUTIONS

# Morgenstadt Global Smart Cities Initiative

## Global Approach – Local Solutions

India – Mexico - Peru

 **University of Stuttgart**  
Institute for Human Factors and  
Technology Management IAT

 **Fraunhofer**

Supported by:

 **Federal Ministry  
for the Environment, Nature Conservation  
and Nuclear Safety**

based on a decision of the German Bundestag

# ABOUT MGI

## Funding



On behalf of



of the Federal Republic of Germany

## Coordination



in cooperation with

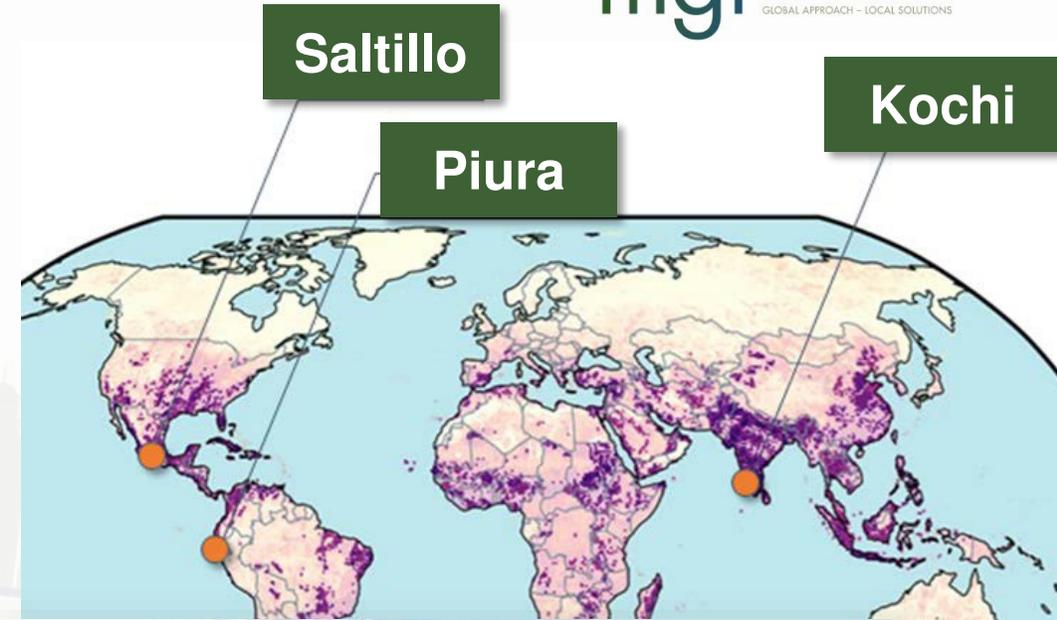


## Implementation



# MISSION

- 🌿 Mitigation of climate change impacts
- 🌿 Low-emission, environmentally conscious and innovative urban development (Sustainable Development Goals (SDG 11))
- 🌿 Replicable and affordable solutions for the resilient and livable city of tomorrow



## PILOT CITIES

- ☘ Strongly affected by **climatic influences** and high degree of **urbanization**
- ☘ **Kochi**: one of the most important ports on the west coast of India
- ☘ **Saltillo**: heart of Mexico's industry
- ☘ **Piura**: capital of the Piura region and one of the fastest growing cities in Peru



# PROCESS

## 1. UNDERSTANDING

## 2. CO-CREATION

## 3. TRANSFORMATION

**Preparation**

**Desktop  
research &  
analysis**

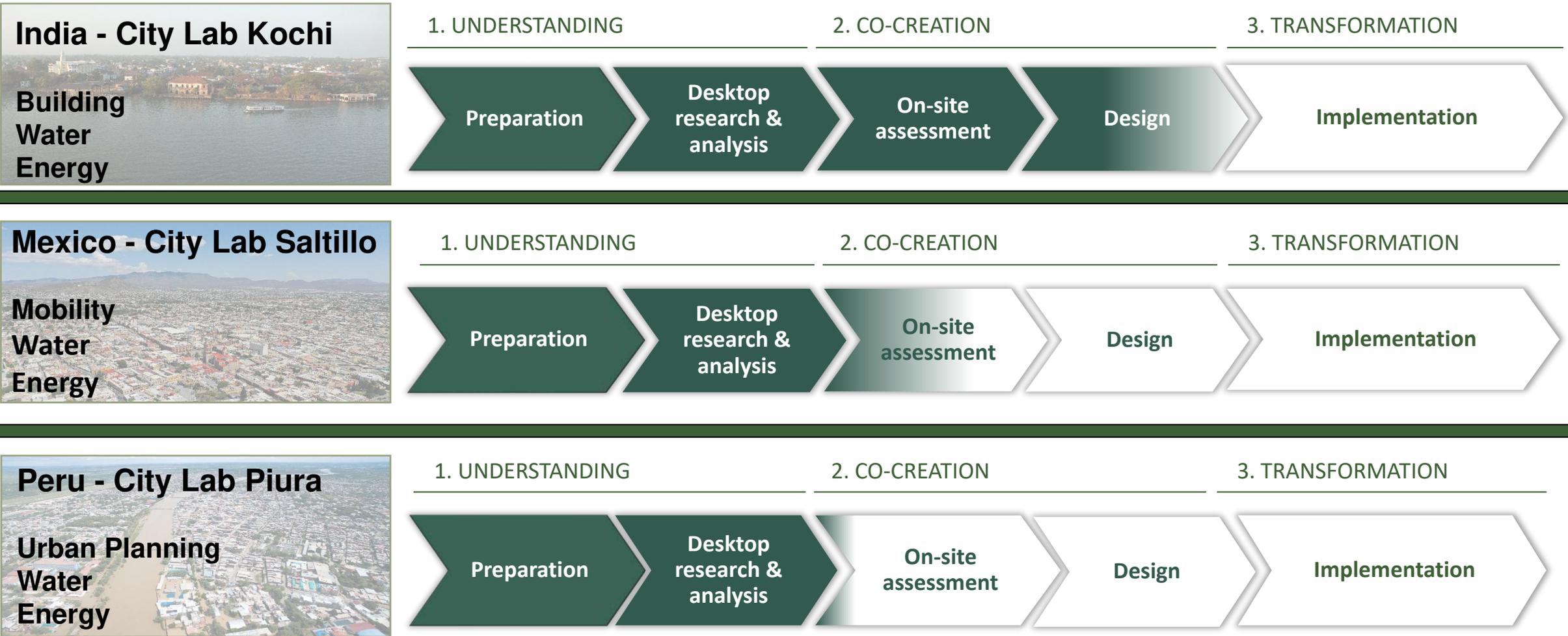
**On-site  
assessment**

**Design**

**Implementation**



# Status of the City Labs

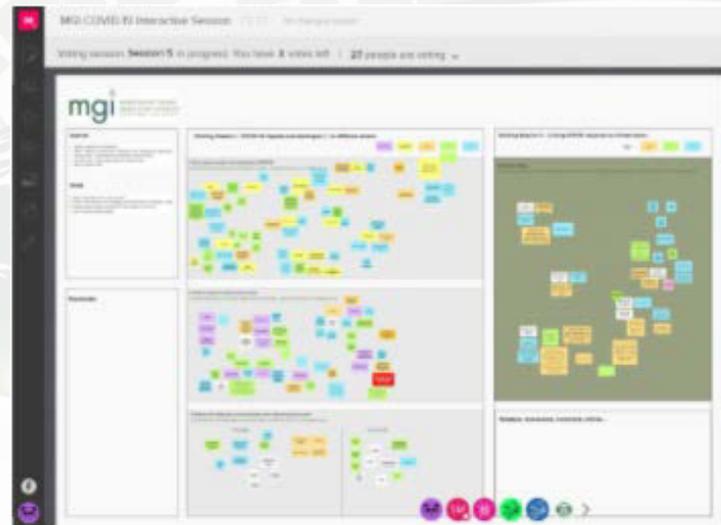


# Interactive Session: Linking COVID's response to climate action

## Objective

- 🌿 Facilitate exchange on COVID-19 response in the MGI partner cities
- 🌿 Identify main impacts and challenges to learn how the project could contribute
- 🌿 Understand the key resilience issues in covid-19 recovery strategies/plans in your country/city
- 🌿 Explore most relevant areas of intervention for tackling both COVID and climate action

July 2020  
26 Participants  
[Link to Blogpost](#)



<https://warmheartworldwide.org/archive-environmental-news-august-2020/>

## Most impacted sectors in the MGI cities Kochi, Saltillo and Piura

Sector	COVID-19 impacts
<b>Mobility</b>	less person transport, no connection between different regions in the country, increased local retail and logistics, shift from public to private transport modes
Tourism	travel warnings and restrictions, impacts on the cultural industry and gastronomy, huge financial and job losses
Health	pressure on existing health infrastructure and personal, up to the level of hospital collapse
Economy	unemployment growth, role of informal economy, increasing rate of homeoffice
Education	closure of education institutes, homeschooling, remote schooling
<b>Energy</b>	lower industrial production and consumption, increased electricity consumption in residential areas
<b>Water</b>	increased demand for water, impacts on water infrastructure and management

# Levers to overcome crisis

## Knowledge & Education

- Knowledge-based decision making
- Reliable and real-time information
- Transparency and knowledge sharing
- Trust in science and policy making

## Stakeholders & Structures

- Collective action and response
- Multi-stakeholder dialogues
- Less bureaucracy

## Policies

- Response strategies
- Stricter control mechanisms
- Hygiene & social distancing
- Promote green employment
- New work (home office)

## Financing & Resources

- Investment in water and sanitary infrastructure
- Increasing healthcare budgets
- Financial aid and economic relief plans supporting a „green recovery“

## Digitalization

- ICT infrastructure to connect sectorial solutions
- Connectivity and access to Internet (remote working)
- Literacy on use of digital tools
- Overarching strategies and sector-based solutions (e.g. health, water availability, energy use)

# Intervention Areas between COVID-19 and Climate Crisis

## Strong communities and neighbourhoods

- Important role in disaster response
- Implementation of adaptation measures
- Information spread
- Taking care of vulnerable groups
- Benefit of having local community leaders
- Multifunctionality of public space and decentral supply systems



## Cycling and walking

- Most climate friendly mobility options
- Allow social distancing and avoiding closed rooms
- Examples of temporary bike lanes being implemented
- Bicycle taxis
- Redesign for a city of short distances
- Design of safe public transport

## Local production and urban farming

- Strengthening local food systems and supply for more self-sufficiency and resilience
- Food system analysis
- Rainwater harvesting, vertical and indoor farming
- Open air markets



## Multifunctional public green spaces

- Importance of green space for climate and livability
- Restriction of indoor activities places importance on outdoor spaces (depending on lockdown rules)
- Multifunctional places with higher quality safety and attractiveness

Pictures: Unsplash

## Homeoffice and new flexible work

- Different forms of remote and digital work have rapidly developed and become mainstream
- Reduced need for (office) space
- Flexible working environments and reduced travel needs will shape future cities



# How climate resilience can help COVID-19 resilience?

**Gaetan Hinojosa**  
Head of Climate Finance Advisory, South Pole



# Linking climate resilience and COVID-19 resilience



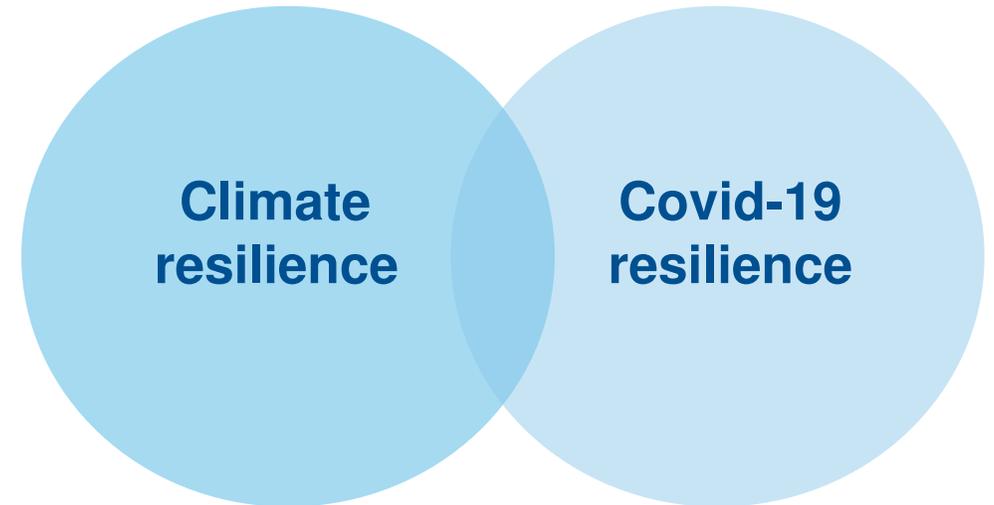
Clear connection between climate and COVID-19 resilience



Climate change increases the likelihood of COVID-type pandemics



Both affect our health and livelihoods - particularly vulnerable populations



# Linking climate resilience and COVID-19 resilience - Examples



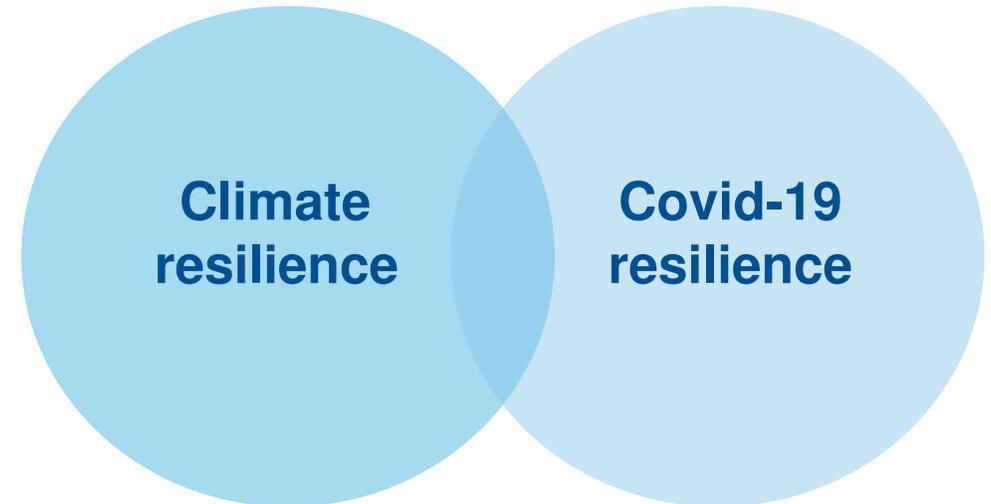
Providing **sustainable sources of electricity in developing countries**

- ✔ Drives low-carbon economic development
- ✔ Can help power healthcare infrastructure



Building **green infrastructure** and **green urban spaces**

- ✔ Lowers air pollution which exacerbates respiratory illnesses\*
- ✔ Protects from urban heat island effect
- ✔ Provides wellbeing during local COVID restrictions



\*Air pollution has increased COVID deaths by 15% (Xiao et al. 2020)

# How to finance a post COVID-19 sustainable recovery

## Two examples



**Pictured:** The Bac Lieu Wind Farm provides clean renewable energy and bridges the supply-demand electricity gap in Vietnam.

# How to finance post COVID-19 sustainable recovery



Offer green economic recovery plans for business, particularly small businesses



Small and Medium Enterprises (SMEs) have badly been affected by COVID-19



Support to SMEs is key to drive post-COVID recovery



Green recovery plans better for employment, environment and GDP than “standard” stimulus packages\*

## The Swiss Technology Fund



Technology Fund

GUARANTEES FOR INNOVATIVE CLIMATE PROTECTION

South Pole co-manages a CHF 250 million fund that provides **loan guarantees for SMEs that sell sustainable products and services.**



\*We Mean Business/Cambridge Econometrics (2019)

# How to finance post COVID-19 sustainable recovery



**Redesign cities and invest in climate-resilient urban measures**



**Parks and green spaces**



**Pedestrian zones, cycle lanes**



**Energy efficiency in buildings**

**COVID resilience**

**Climate resilience**



## The CITY FINANCE LAB (CFL)



**CITY FINANCE LAB**

[www.cityfinancelab.com](http://www.cityfinancelab.com)

The CFL supports the development of **innovative financing solutions** for **sustainable cities**



# Thank you

Contact



**Gaetan Hinojosa**

**Head of Climate Finance Advisory,  
South Pole**

[g.hinojosa@southpole.com](mailto:g.hinojosa@southpole.com)



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**Offices & global representations:**

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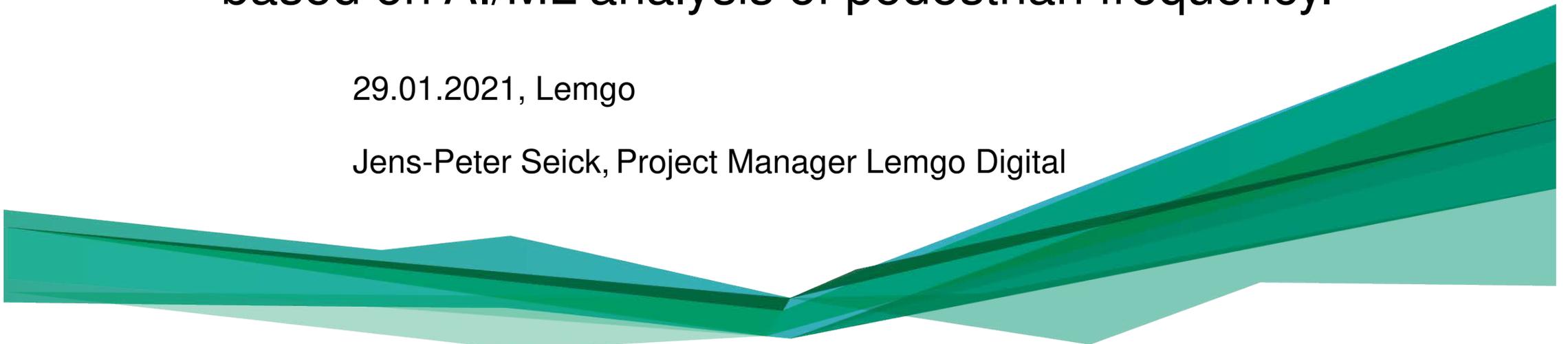


## Morgenstadt – Global Smart Cities Initiative – Webinar

Social Distance Index –  
based on AI/ML analysis of pedestrian frequency.

29.01.2021, Lemgo

Jens-Peter Seick, Project Manager Lemgo Digital



# Bad times for local retailers and restaurants

## Impact of Covid-19 on downtown business



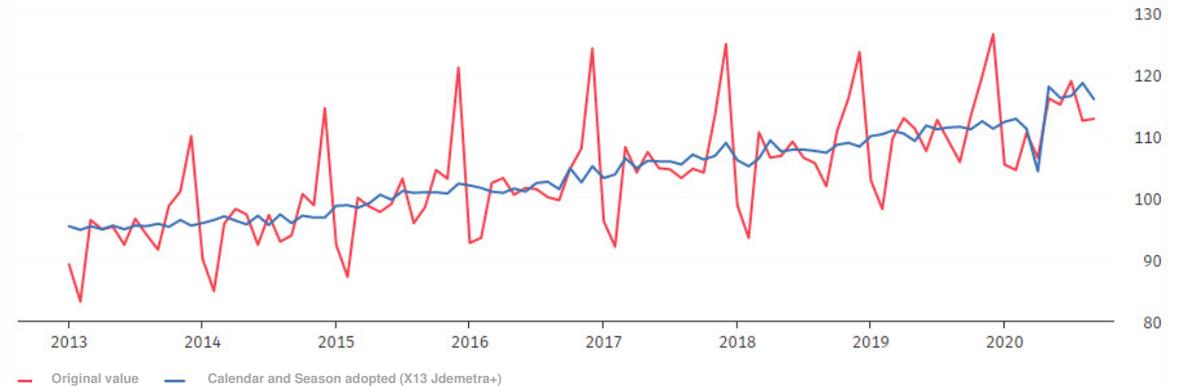
Source: <https://www.klaeschen-lemgo.de/klaeschen/>

- Nothing possible – shops closed, restaurants closed, no entertainment, no events
- in Germany: retailers generate 19% of their yearly revenue in November and December
- 30% up to 50% of revenues in conjunction with city events are generated during Christmas time
- It is evident that the consequences of a lock down must be limited for trade and catering as much as possible



Source: unsplash.com

Revenue of retailers, at constant prices (Germany)  
2015=100



© Statistisches Bundesamt (Destatis), 2020

# City centres suffer - can agility be brought back?

## How can we limit the impact in future cases?

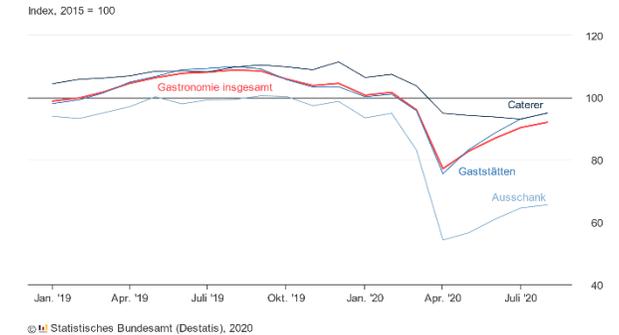
- Covid-19 lock down is threatening the existence of many business, specifically related to city centres, downtown and city events
- Basis for decision making in Covid-19 crisis teams: **data**
- Data is  to analyse the current situation and for projection of effectiveness of action
- The more (reliable) information we have, the better the decisions will be



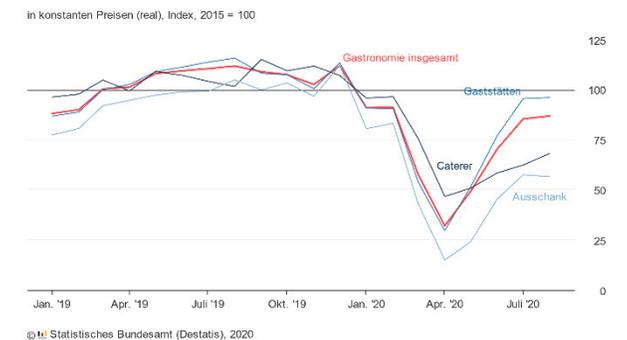
Source: unsplash.com

High demand for smart solution

Employees in gastronomy (Germany)

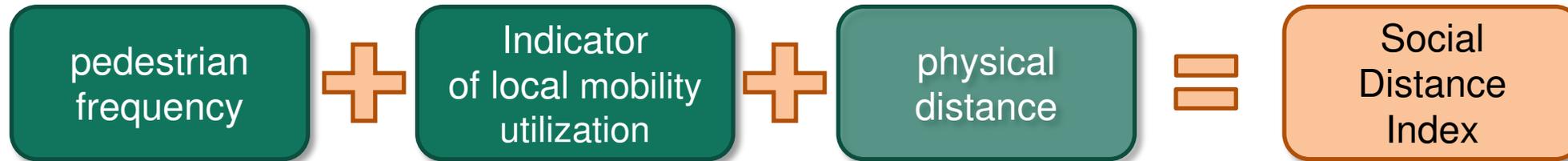


Revenue of gastronomy (Germany)

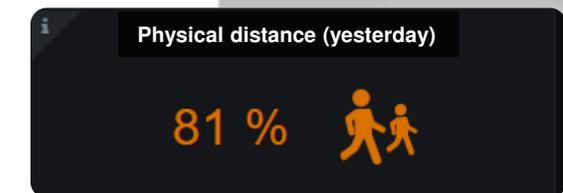




# Smart Pedestrian Frequency measurement supporting distinguished decision making



- Enhancing reports for visitor density in inner city or at places
  - Pedestrian frequency: measures current number of people at one specific place within the city. Best: sensors at many places.
  - Indicator of local mobility utilization: sensors to measure public transport utilization plus sensors measuring utilization on street
  - Physical distance: please wait for next slide
- Social Distance Index
  - An AI / ML model is trained based in historical data, allowing to predict whether number of people is overflowing inner city
    - Too many people to guarantee Covid based minimum distance
  - Low level prototype (sensors) implemented in Lemgo
  - AI / ML algorithm available as a result of a Hackathon



# Further options

## Outlook

- Physical distance – direct measurement
  - ML-based analysis of optical sensors (e.g. WebCam)
    - Data Security and Privacy needs to be guaranteed and secured!
  - In the pedestrian zone
  - In parks, at public areas
  - Inside buildings
- Enhancement „Distance Keeper“
  - Technology allows feed back at specific areas
    - Too close, action required
    - Getting critical, attention
    - All good, thank you



Source: werma.com

© 2021 Fraunhofer IOSB-INA

Demo example, using a public WebCam.  
Lemgo pedestrian zone.

Source: Fraunhofer IOSB-INA



Smart solution – smart decisions –  
higher comfort at same level of protection

# Your Lemgo Digital / Smart City team:



## CONTACT

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SMART CITIES INITIATIVE  
GLOBAL APPROACH – LOCAL SOLUTIONS

# Linking COVID-19 Response to Climate Action

Break

 **University of Stuttgart**  
Institute for Human Factors and  
Technology Management IAT

 **Fraunhofer**

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# PIURA, TACNA & IQUIQUE

## ADAPTATION STRATEGIES IN NEIGHBOURHOOD PUBLIC SPACES IN THE TIME OF COVID-19

## ESTRATEGIAS DE ADAPTACIÓN EN EL ESPACIO PÚBLICO EN TIEMPOS DEL COVID-19

Key words: Coronavirus, Active citizenship, Neighborhood, Public space

Palabras clave: Coronavirus, Ciudadanía activa, Vecindario, Espacio público

### **South Pacific Desert Landscapes Network / Red Paisajes de los Desiertos del Pacífico Sur.**

**Stella Schroeder.** Facultad de Ingeniería. Universidad de Piura. Perú

**Elizabeth Abanto Sánchez.** Facultad de Ingeniería Civil, Arquitectura y Geotecnia. Universidad Nacional Jorge Basadre Grohmann. Perú

**Alberto Prado Diaz.** Facultad de Ingeniería y Arquitectura. Universidad A. Prat. Iquique. Chile

**Keily Medina Bejar.** Facultad de Ingeniería Civil, Arquitectura y Geotecnia. Universidad Nacional Jorge Basadre Grohmann. Perú

**Edsmilda Martínez Hidalgo.** Facultad de Ingeniería. Universidad de Piura. Perú

**Isabela Paredes Fuentes.** Facultad de Ingeniería y Arquitectura. Universidad A. Prat. Iquique. Chile

# COVID-19. CITIES ARE EXPERIENCING AN IMPORTANT PROCESS OF SOCIO-SPATIAL TRANSFORMATION.

## PROBLEM

A **global phenomenon**, which is significantly **affecting the way we live**, intensifying the basis of an urban crisis that challenges our idea of the city.

## OPORTUNITY

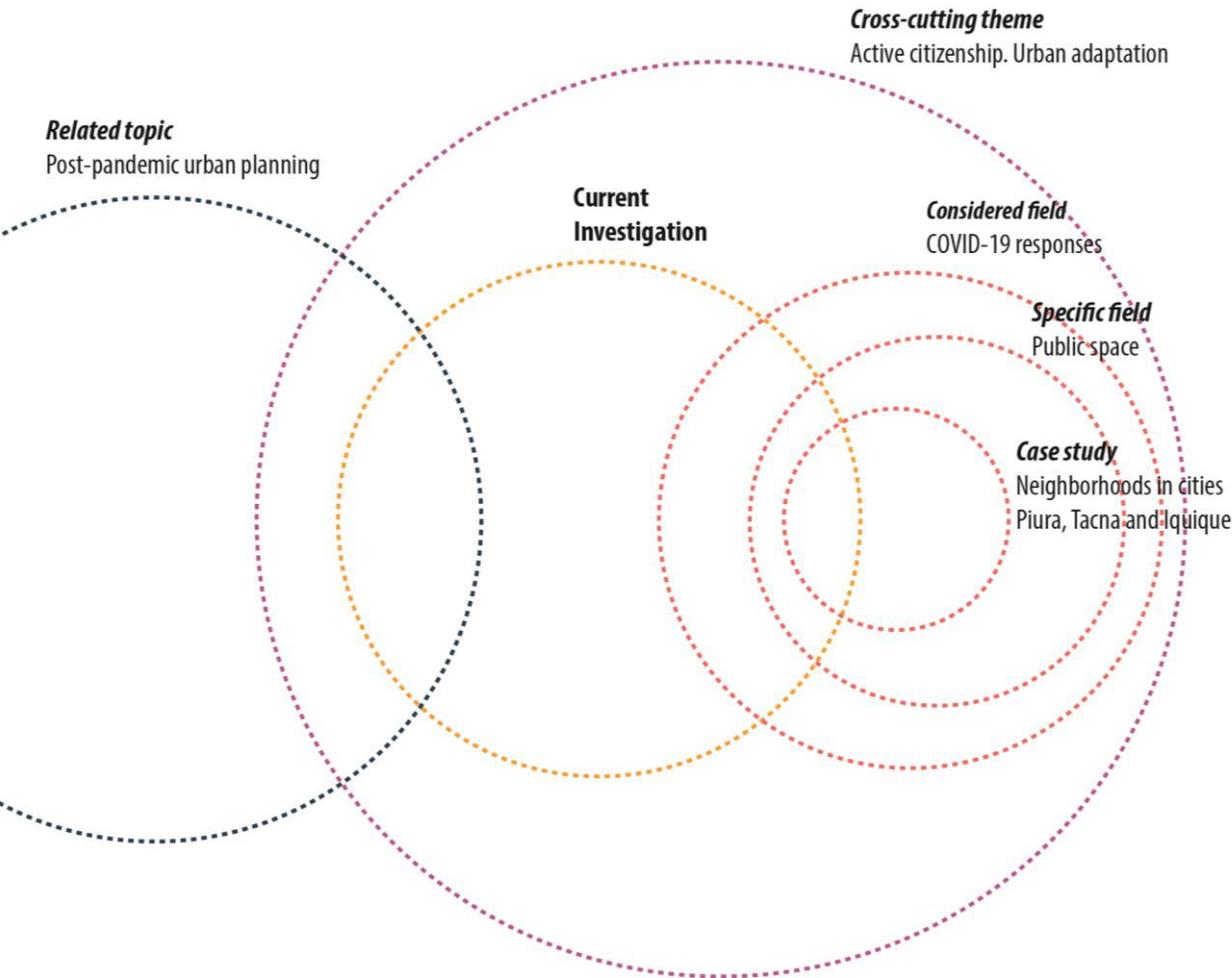
The pandemic has shown the power of **change in the behavior of human beings**, and how much impact this adaptation process can have on the different social, economic and environmental spheres of our society.

**Public space becomes relevant as a scene of complex confluence of actors** who, through their various forms of appropriation, **show an active citizenship**.

**The crisis will transform our relationship with urban space**, which will have to adjust its design and infrastructure to the “new normal”.



# STRUCTURE OF THE INVESTIGATION



Authors such as Hou (2020) or Devlin (2018) refer to the **concept of insurgent citizenship** to characterize the claims of members of the subaltern society.

During and after the "lockdown" **different forms of appropriation and adaptation.** The temporality of appropriation becomes an essential element of urban flexibility (Lara-Hernandez, Coulter and Melis 2020).

**Public spaces are an essential part of the urban landscape and host a variety of public activities** that are temporary in nature (Madanipour 1996; Moudon 1991).

Research highlights the **importance of neighborhood unity** in a post-pandemic time (BID 2020; Honey-Rosés et al. 2020).

**Trust needs to be rebuilt with public space, both during and after the pandemic** (UN-Habitat 2020).

## OBJETIVO Y PREGUNTAS DE INVESTIGACIÓN

# O

Achieve a level of **understanding according to what is happening in the cities**, and the experiences in the neighborhoods on the effects of the pandemic.

Comprehensive assessment of urban life to **understand how public spaces are serving the unique needs of communities**.

**Understand the various urban dynamics** present in cities due to the effects of the pandemic.

Changing the use of public space

**How has the use of public space** in neighborhoods changed?

The "new normal"

Are there things we are doing now that will **become part of the "new normal"**?

Planning the urban future

**What can we learn** from the use of public spaces during the crisis, which will make for a **better urban future for all**?

# METHODS. QUESTIONNAIRE AND FIELD OBSERVATIONS

## Field work, carried out in the months of September and October 2020

### Questionnaire (online / offline)

- Perception of the COVID-19 impact
- Questions about public space
- Relationship between neighbors and public space
- Activities before and during the pandemic
- Commerce
- Neighborhood perception of value and vision for the future
- General inquiries

Direct observations accompanied by focal conversations with neighbors to understand the use of public space and change before - after.

Documentation with photos.



<p><b>EVALUACIÓN DE LA VIDA COTIDIANA EN EL ESPACIO PÚBLICO EN SANTA ROSA DURANTE LA CUARENTENA Y CRISIS DEL COVID-19.</b></p> <p>La Red de los Paisajes de los Desiertos del Pacífico Sur, es una red que reúne a investigadores de universidades de Perú y Chile, entre ellas la Universidad de Piura, quienes trabajan en una investigación que busca evidenciar las transformaciones en el espacio público ocasionadas por los cambios de la vida pública cotidiana durante la pandemia del COVID-19.</p> <p>En este sentido, se considera que es necesario repasar los cambios de la vida cotidiana en los espacios públicos de la ciudad, considerando los activos y recursos sociales de los habitantes, lo que nos va a poder dar respuestas adecuadas para proponer una reconfiguración del vecindario postpandémico.</p> <p>El esquema que hemos propuesto, lo de evaluar las variables que influyen en el uso del espacio público, deberá permitir maximizar la comprensión del efecto de la cuarentena sobre la vida cotidiana y el rol del espacio público en el cumplimiento del bienestar social. En este contexto, invitamos a los vecinos de Santa Rosa a responder el siguiente cuestionario:</p> <p>¿Cómo evalúa usted el impacto de COVID-19 en las ciudades?*</p> <p><input type="radio"/> Más grande que nada en los últimos 20 años.</p> <p><input type="radio"/> Muy alto, pero comparable al 2017</p> <p><input type="radio"/> Alto, pero bastante manejable</p> <p><input type="radio"/> Una crisis como muchas otras. Pasará</p> <p><input type="radio"/> Mínimo</p> <p>¿Cuál es lo que considera como espacio público?*</p> <p><input type="checkbox"/> Espacios abiertos (Veredas, calles)</p> <p><input type="checkbox"/> Espacios de encuentro (Plazas)</p> <p><input type="checkbox"/> Espacios recreativos (Parques, juegos)</p>	<p><b>LINEA DE INVESTIGACIÓN PAISAJES Y TERRITORIOS EN CIUDADES DE LOS DESIERTOS DEL PACÍFICO SUR: PIURA, TACNA E IQUIQUE: ESTRATEGIAS INFORMALES Y ESPONTÁNEAS DE ADAPTACIÓN EN TIEMPOS DEL COVID-19</b></p> <p>EVALUACIÓN DE LA VIDA COTIDIANA EN EL ESPACIO PÚBLICO EN LA POBLACIÓN CASERÍAS URBANAS Y SECTOR AUTOCENTRACION JACO HERRERA DURANTE LA CUARENTENA Y CRISIS DEL COVID-19.</p> <p>La Red de los Paisajes de los Desiertos del Pacífico Sur, es una red que reúne a investigadores de universidades de Perú y Chile, quienes trabajan en una investigación que busca evidenciar las transformaciones del espacio público ocasionadas por los cambios de la vida pública cotidiana durante la pandemia del COVID-19.</p> <p>En este sentido, se considera que es necesario repasar las transformaciones de la vida cotidiana en los espacios públicos de la ciudad, considerando los activos y recursos sociales de los habitantes, los que pueden dar respuestas adecuadas para proponer una reconfiguración del vecindario postpandémico.</p> <p>El esquema que hemos propuesto, lo de evaluar las variables que influyen en el uso del espacio público, deberá permitir maximizar la comprensión del efecto de la cuarentena sobre la vida cotidiana, y el rol del espacio público en el cumplimiento del bienestar social. En este contexto, invitamos a los vecinos de la Población Caserías a responder el siguiente cuestionario:</p> <p>¿Cómo evalúa usted el impacto de COVID-19 en las ciudades?*</p> <p><input type="radio"/> Más grande que nada en los últimos 20 años.</p> <p><input type="radio"/> Muy alto, pero comparable al Terremoto 2014 / Lluvia 2016/71 y al Estado de Salud de Octubre 2019</p> <p>¿Cuál es lo que considera como espacio público?*</p> <p><input type="checkbox"/> Espacios abiertos (Veredas, calles)</p> <p><input type="checkbox"/> Espacios de encuentro (Plazas)</p> <p><input type="checkbox"/> Espacios recreativos (Parques recreativos, campos deportivos)</p>	<p><b>EVALUACIÓN DE LA VIDA COTIDIANA EN EL ESPACIO PÚBLICO EN LA ASOC. DE VIV. SAN FRANCISCO DURANTE LA CUARENTENA Y CRISIS DEL COVID-19.</b></p> <p>La Red de los Paisajes de los Desiertos del Pacífico Sur, es una red que reúne a investigadores de universidades de Perú y Chile, entre ellas la Universidad Nacional Jorge Basadre Grohmann, quienes trabajan en una investigación que busca evidenciar las transformaciones en el espacio público, ocasionadas por los cambios de la vida pública cotidiana durante la pandemia del COVID-19.</p> <p>En este sentido, se considera que es necesario repasar los cambios de la vida cotidiana en los espacios públicos de la ciudad, considerando los activos y recursos sociales de los habitantes, lo que nos va a poder dar respuestas adecuadas para proponer una reconfiguración del vecindario postpandémico.</p> <p>El esquema que hemos propuesto, lo de evaluar las variables que influyen en el uso del espacio público, deberá permitir maximizar la comprensión del efecto de la cuarentena sobre la vida cotidiana y el rol del espacio público en el cumplimiento del bienestar social. En este contexto, invitamos a los vecinos de la Asociación de Viv. San Francisco a responder el siguiente cuestionario:</p> <p>¿Cómo evalúa usted el impacto de COVID-19 en las ciudades?*</p> <p><input type="radio"/> Más grande que nada en los últimos 20 años.</p> <p><input type="radio"/> Muy alto, pero comparable al terremoto del 2001</p> <p><input type="radio"/> Alto, pero bastante manejable</p> <p><input type="radio"/> Una crisis como muchas otras, pasará</p> <p><input type="radio"/> Mínimo</p> <p>¿Cuál es lo que considera como espacio público?*</p> <p><input type="checkbox"/> Espacios abiertos (Veredas, calles)</p> <p><input type="checkbox"/> Espacios de encuentro (Plazas)</p> <p><input type="checkbox"/> Espacios recreativos (Parques recreativos, campos deportivos)</p>
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# PIURA. TACNA. IQUIQUE.

## CITIES THAT SHARE COMMON LANDSCAPES

### Piura

Population	Density	Development
547.184	479,82inh/km <sup>2</sup>	10%

70% informal urbanized land  
1,3m<sup>2</sup>/inhab. green area  
It does not have an Urban Development Plan

### Tacna

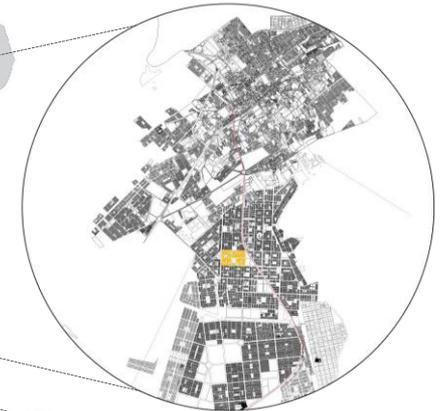
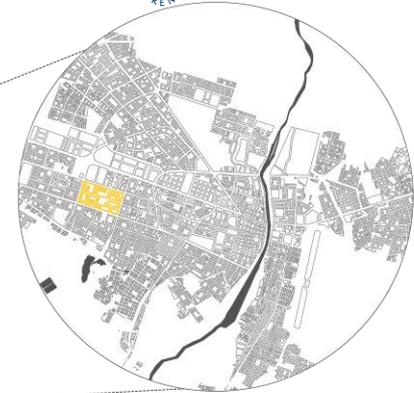
Population	Density	Development
277.430	196,85 inh/km <sup>2</sup>	12%

96% informal urbanized land  
3,25m<sup>2</sup>/inhab. green area  
Urban Development Plan Tacna 2015 -2025

### Iquique

Population	Density	Development
294.949	106,5 inh/km <sup>2</sup>	28%

0,96 m<sup>2</sup>/inhab. green area  
It does not have an Urban Development Plan  
Iquique Regulatory Plan 1981



### 3 CITIES. 3 NEIGHBORHOODS

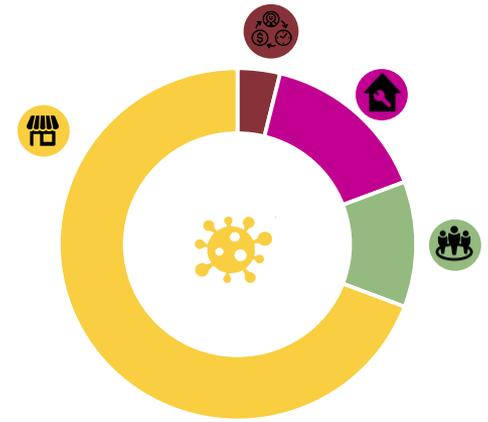
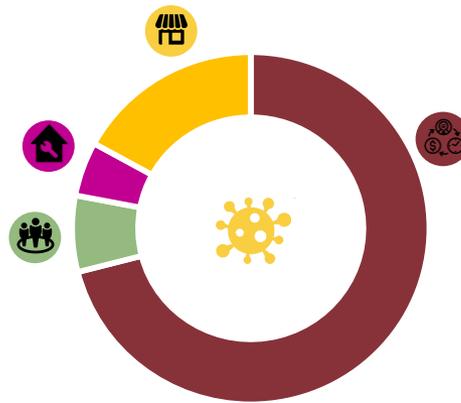
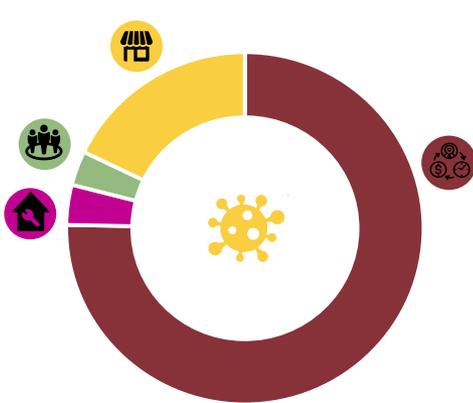
A.H. Santa Rosa. Piura



Asociación San Francisco. Tacna

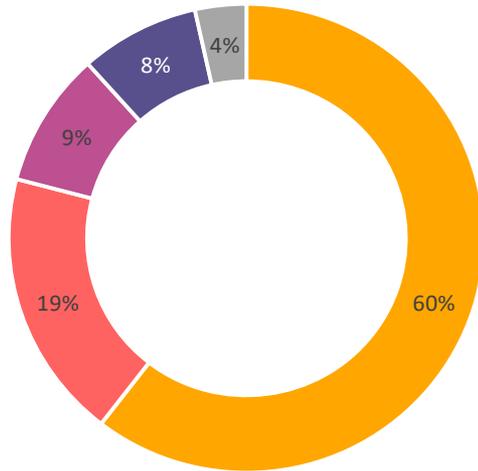


Población Caupolicán. Iquique



# WHAT ABOUT THE IMPACT OF COVID IN OUR DAILY LIVES?

How do you assess the impact of COVID-19 in cities?



- Bigger than anything in the last 20 years
- Big, but quite manageable
- Very high, but comparable earthquakes or El Niño phenomenon
- A crisis like many others
- Minimum



## PIURA. TACNA. IQUIQUE.

# WHAT HAS CHANGED IN PUBLIC SPACE DURING THE CRISIS?



Larger parks and squares that are in good condition, are empty spaces. While **small public spaces are used.**



**Little use of public spaces that are not close to the house.**



**Neighbors go out to work, to go to the health center or the nearest market, the one that has been most used by quarantine.**



**A certain distance is maintained, as well as the use of the mask, showing the impact on the perception of the inhabitants in the life of each one of them.**



**More order and cleaner, more care.** Neighbors take care of the beautification and cleaning of their surroundings. Sowing grass and plants. The neighbors organize themselves for maintenance and irrigation.



**Urban gardens.** Growing tomato, pumpkin, pepper. Delimitation of an empty area. Neighbors take more responsibility for its use and maintenance. **Neighbors "repeat" the idea of the garden**



**New groceries spaces and other businesses emerged.** Where food is sold, such as toys, it is generally appreciated that they use tents and occupy the sidewalk and berm.



**More startups. Some stated that they worked in other areas, and opened their little shop.** New businesses emerged, especially small shops. Clothing stores, hairdressers, butchers.



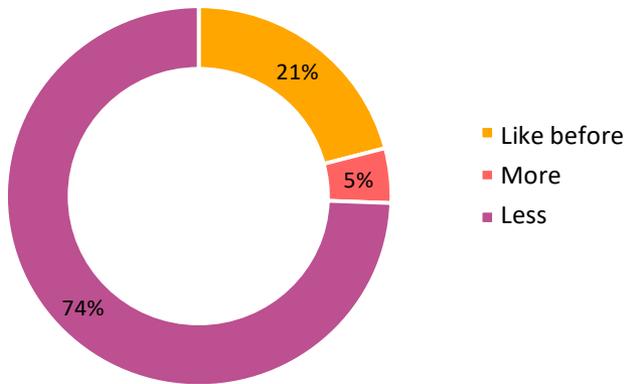
**Increase in informal ambulatory sale of fruits, vegetables and fish increased.** Vendors use the streets of the neighborhood.



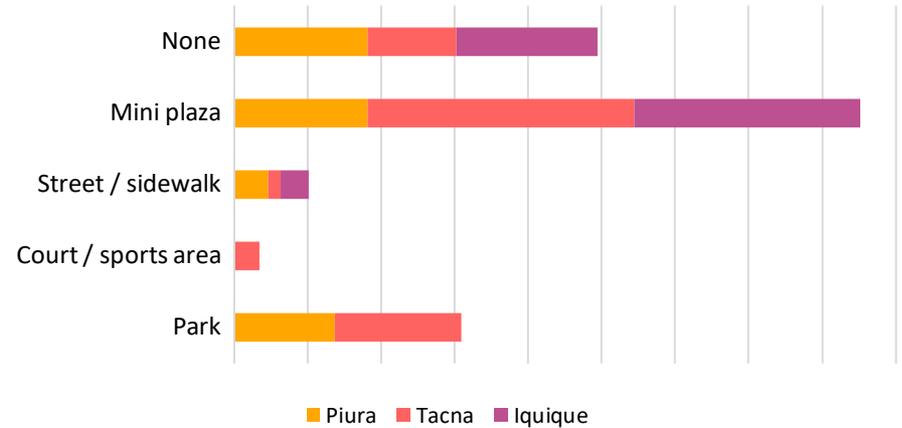
**Neighbors prefer to walk.** Few use the bus, they prefer mototaxi.

# CHANGE IN THE USE OF PARKS, SQUARES OR STREETS

Are you spending more time in your neighborhood public space than before the pandemic? (three cities)



What public space are you frequenting the most within the neighborhood?



Park Santa Rosa, Piura



Plaza San Francisco, Tacna



Plaza closed for public use, Iquique



# EMBELLISHMENT AND URBAN GARDENS

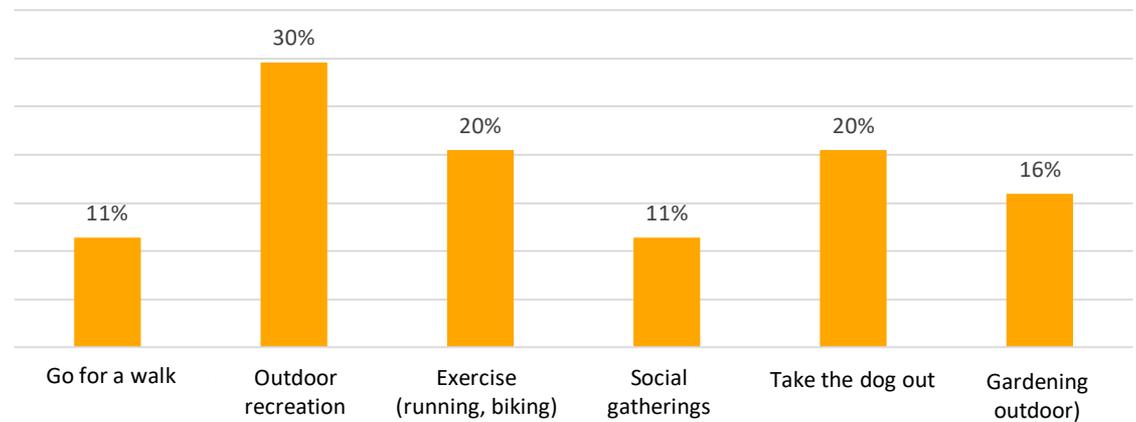
More care of green areas.

More communication between neighbors and more union.

"Plants improve air quality and reduce the risk of contagion"



In which of the following activities do you participate in public space? (Piura)



Berm embellishment, Tacna



Contributions to the public space, Iquique

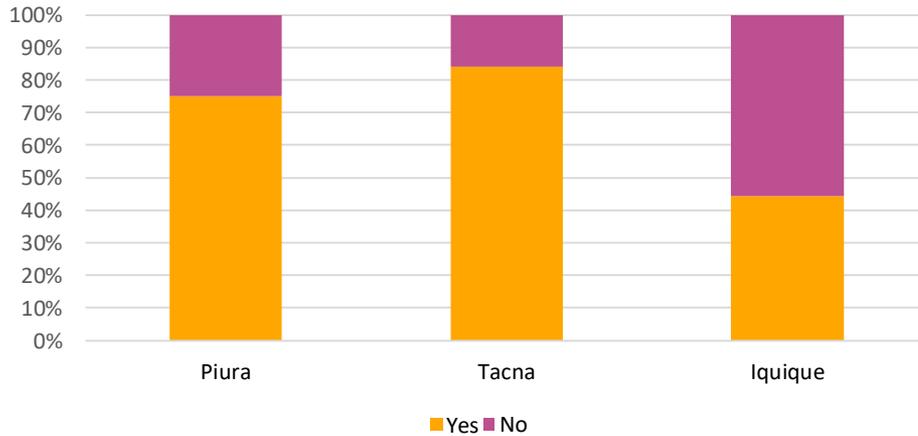


Urban gardening, Santa Rosa, Piura

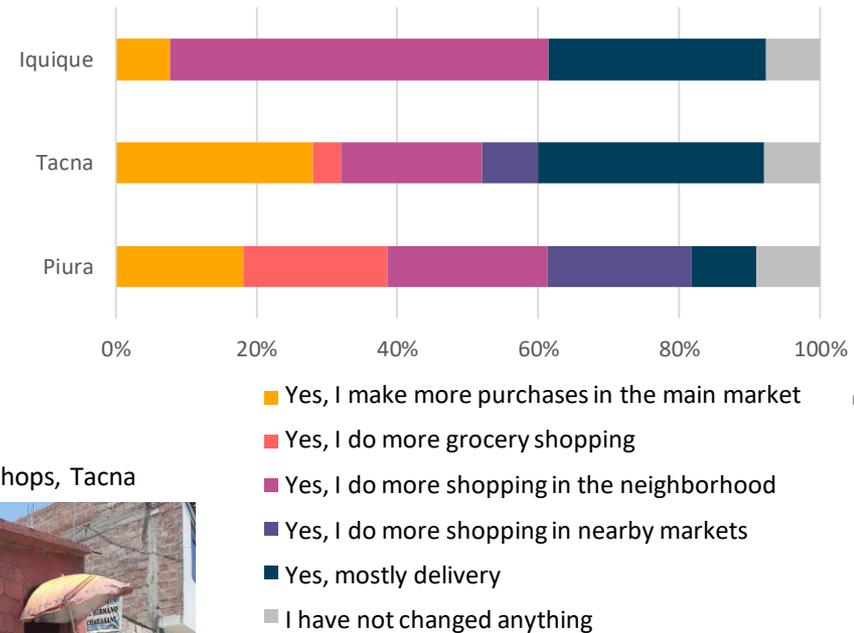


# TRADE AND SHOPPING BEHAVIOR

Did more businesses or informal activities pop up in your neighborhood?



Have you changed your behavior of basic shopping (food)?



Sale of fruits and vegetables, Piura



Street vending, Iquique



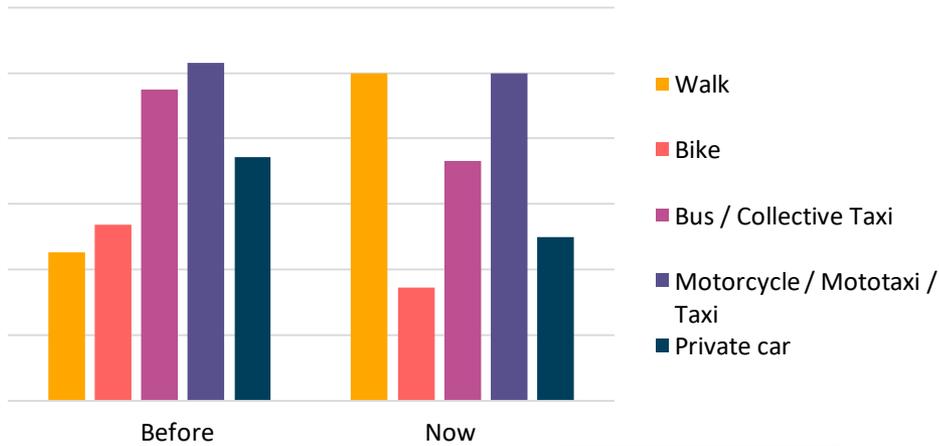
Small shops, Tacna



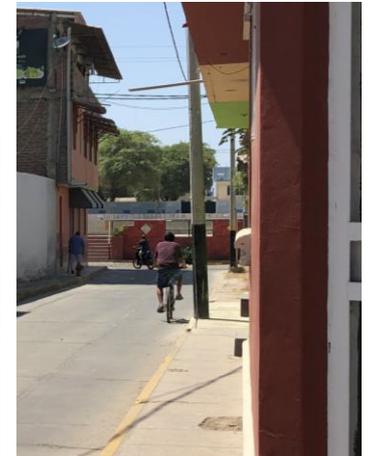
- Yes, I make more purchases in the main market
- Yes, I do more grocery shopping
- Yes, I do more shopping in the neighborhood
- Yes, I do more shopping in nearby markets
- Yes, mostly delivery
- I have not changed anything

# MOBILITY

What transport do you use the most to get around?  
(Piura & Tacna)



Use of bicycles, Tacna y Piura



Ciclobandas, Iquique



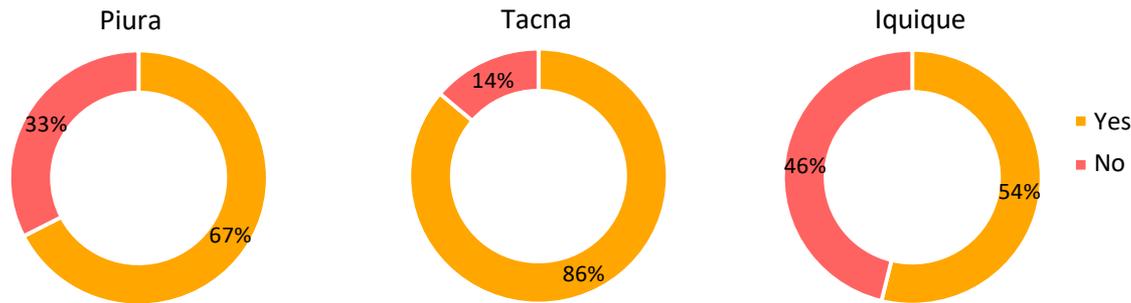
Piura: "Bicycle trips would increase to 9% after the quarantine" (udep, 2020)

Provincial Municipality of Tacna studies the enabling of bicycle lanes and biciparquesos (mpt, 2020)

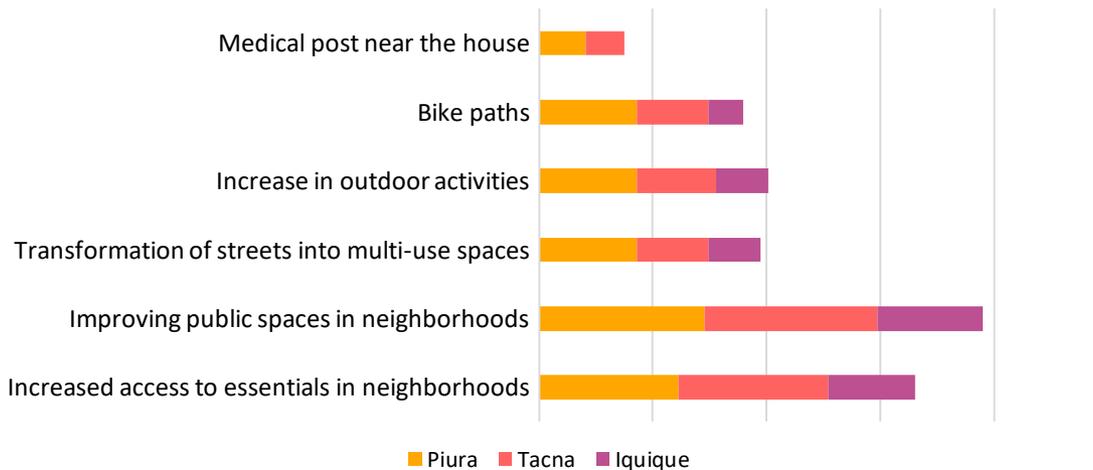
Municipality of Iquique opens survey on future location of bike-parking (municipioiquique, 2020)

# WISHES FOR AN URBAN FUTURE

Has your perception changed, due to the restrictions of the pandemic, the importance of your neighborhood?



Assess the most important aspects for the development of the neighborhood after the pandemic.




More green areas and open spaces for recreation, for social gatherings.

Laundry rooms on every corner, improvements in the area of health.

Improve equipment for recreational spaces.

Support from the municipality to small businesses for their formalization and development.

More activities near the house, sports activities.



Protection of animals from neighbors but above all that the municipality encourages it, culture of cleaning and recycling of garbage.

# WHAT HAVE WE LEARNED ABOUT HOW PUBLIC SPACES ARE USED IN ALL THREE NEIGHBORHOODS?

	Results			
<b>Piura</b>	<p><b>1. Use of public space for the sale of products. More informal and ambulatory commerce.</b></p> <p>1.1. Small shops occupy the sidewalks for the presentation of the products. 1.2. Street vending of fruits, fish and clothes.</p>	<p><b>2. Concern of the neighbors in the care of the nearest public spaces.</b></p> <p>2.1. 67% say perception has changed to the importance of the neighborhood. 2.2. More gardening and urban gardens.</p>	<p><b>3. Little use of the neighborhood's larger public spaces like park and plaza.</b></p> <p>3.1. Many spaces unused. 3.2. Social activities in small neighborhood spaces, corners, sidewalk, etc.</p>	<p><b>4. Change in the perception of the neighborhood as an important unit in daily life.</b></p> <p>4.1. More activities close to the house. 4.2. There is more order in the purchase. 4.3. Cleaner, greener neighborhoods</p>
<b>Tacna</b>	<p><b>1. Use of public space for the sale of products. More informal and ambulatory commerce.</b></p> <p>1.1. Small shops occupy the sidewalks for the presentation of the products. 1.2. Street vending of fruits, fish and clothes.</p>	<p><b>2. Little use of the main public spaces (sports fields, squares and parks).</b></p> <p>2.1. Unused main public spaces.</p>	<p><b>3. Change in the perception of the neighborhood as an important unit in daily life.</b></p> <p>3.1. More activities close to the house. 3.2 Organization and order when buying various products. 3.3. Care of public environment</p>	
<b>Iquique</b>	<p><b>1. The impact of Covid-19 has allowed us to reflect on the city we have built.</b></p> <p><b>2. For the majority, the public space is made up of streets, sidewalks and recreational spaces. But, the neighborhoods lack public spaces.</b></p>	<p><b>3. The neighborhood does not have public space or equipment services.</b></p> <p>3.1. Search for places of recreation and meeting. The streets and sidewalks are for cars; However, it has historically been considered a space for celebration and popular rituals.</p>	<p><b>4. Buying behaviors have been modified.</b></p> <p>4.1. Shopping in small neighborhood shops and relations between neighbors have been strengthened. 4.2. Neighborhood perception improved.</p>	<p><b>5. Change in the perception of the neighborhood as an important unit in daily life.</b></p> <p>5.1. More interaction. 5.2. Greater consideration by neighborhood councils for the quality of public space. 5.3. For a large group, the situation remains the same.</p>

## HOW TO USE THE INFORMATION FOR AN URBAN FUTURE?

### Conclusions and reflexions



**1. The pandemic has changed shopping habits.** More purchases are made within the neighborhood, fruits, local and basic products. **The neighborhood needs to define spaces to regularize outdoor sales where businesses and services are decentralized.**

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**2. Neighbors take care of area close to their home.** Cities can use their **potential from unused spaces, such as brownfields.** Through public management, certain spaces in the neighborhood can be defined to create urban gardens with an organization between neighbors. Community gardens also provide an alternative to public parks and can develop safe distancing rules.

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**3. People continue to feel uncomfortable using the larger public spaces,** various other forms of public life are as vibrant or more utilized than before the pandemic. **Cities should be better guarantors of quality of life provided that they are safe and resilient, capable of withstanding unexpected shocks.** They will need to have good governance, flexible enough to essential services to meet the needs and security of their citizens.

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**4. People evaluate improving public spaces in neighborhoods and increasing outdoor activities as the most important aspects for neighborhood development after the pandemic.** Cities need adequate public space and more sustainable mobility options to allow people to move more efficiently and respect social distancing. **All these attributes are essential for a 15-minute city, just as they are essential for improving people's quality of life and health.**

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**5. Temporary urban solutions appear to have helped many cities cope with the crisis,** and these can lead to positive radical changes in urban space. **Permanent transformations will continue to require changes in personal habits, policies, incentives and infrastructures.** It will help to understand where and why some of the changes have been adopted.

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¡THANK YOU!



### South Pacific Desert Landscapes Network / Red Paisajes de los Desiertos del Pacífico Sur.

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**Keily Medina Bejar.** Facultad de Ingeniería Civil, Arquitectura y Geotecnia. Universidad Nacional Jorge Basadre Grohmann. Perú

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# **„Stuttgart’s shopping buddies“ – Bottom-up Community Support Initiatives during the Pandemic**



## Stuttgart's shopping buddies – our initiative in a nutshell

We **support people at risk who are not able to go personally to the food banks** due to the pandemic.

Our volunteers go to the food banks for anyone who cannot go on his/her own during this situation – e.g. people at risk - those who cannot physically endure the extremely long wait times, or single parents not allowed to bring their kids.

They make it possible that their fellow citizens continue to receive the support from the foodbanks in order to secure their day to day needs. This is a small relief - in a difficult situation. Our volunteers receive tremendous gratitude and their weekly visits are held in high regard.

We had 150 volunteers during the first wave of the pandemic and at the moment, our volunteers support **approx. 30 households in Stuttgart.**





# The Global Shapers Community – youth organization of the World Economic Forum



## 9591 Shapers worldwide

A network of inspiring young people under the age of 30 working together to address local, regional and global challenges



## 431 Hubs

Hubs are diverse teams of young people united by common values – inclusion, collaboration and shared decision-making. Together, they create projects and change for their communities.



## 148 Countries

Global Shapers Community is a global initiative of the World Economic Forum

The Global Shapers Community focuses on local impact for global change in **3 impact areas:**

- 1) Climate and Environment
- 2) Education and Employment
- 3) Equity and Inclusion

In 2019, the Stuttgart hub was founded. Since then, we drive various projects in Stuttgart to contribute to a sustainable, liveable and future-oriented city.



## We as global shapers created and organize the initiative

### Network:

- We created a very strong network of private volunteers
- We partnered with the food banks in Stuttgart: Schwäbische Tafel Stuttgart e.V.

### Promotion:

- We published the initiative on the city's platform
- We hang flyers all over the city e.g. in pharmacies and supermarkets

### Process:

- We provide guidelines for a safe process in accordance with the ones from the public health institutions
- We created all necessary infrastructure

### Doing:

- We are the first point of contact for everyone needing support (by mail or telephone)
- We register volunteers and everyone needing support
- We connect people in need with volunteers
- We answer all questions during the process





# Our network

## > 150 volunteers

Showing huge commitment and their solidarity by helping their fellow citizens



## Schwäbische Tafel Stuttgart e.V.

Tackles food waste and poverty by selling groceries that cannot be sold in supermarkets anymore (close to expiration date, bread from the day before etc.) to people in need

- 4 locations in Stuttgart
- Very low prices (only to cover part of the costs)
- Run by volunteers and long-term unemployed

During the pandemic the number of customers has increased rapidly. However, due to the hygiene and safety measures, waiting times have increased tremendously and have become unbearable to many customers (particularly the elderly).



## Stuttgart's shopping buddies



## City of Stuttgart

City hall, public health department



## Other community support initiatives

Exchange with Caritas, SPD, nebenan.de, etc.





# How the city of Stuttgart supports Covid initiatives (1/2)

The city of Stuttgart published a website with relevant information concerning Covid-19

Besides the general public, they focus on the following target groups:

1. People in need: Central overview of all measures and initiatives (private and public ones)
  - Support in everyday chores e.g. grocery shopping
  - Masks and other protective supply
  - Contact, letter exchange, encouragement
  - Support in learning, language and migration
  - Life and crisis coaching

→ every initiative can register and will be validated by the city
2. People who want to help:
  - Ideas to offer help and show solidarity
  - All organizations one can engage with

## Die Landeshauptstadt Stuttgart informiert

- > **Lockdown bis Ende Januar verlängert**  
Bund und Länder haben sich darauf geeinigt, den Lockdown zu verlängern und zu verschärfen. Baden-Württemberg hat seine Corona-Verordnung angepasst. Sie gilt seit Montag, 11. Januar. [Webseite baden-wuerttemberg.de](#)
- > **Kitas und Schulen bleiben vorerst weiter geschlossen.** Das gaben Ministerpräsident Winfried Kretschmann und Kultusministerin Susanne Eisenmann am Donnerstag, 14. Januar, bekannt. Die Landeshauptstadt Stuttgart will die Notbetreuung für Kinder ausbauen, die digital schwer zu erreichen sind. [Informationen mit Beratungs- und Hilfsangeboten für Eltern, Jugendliche und Kinder.](#)
- > **Corona-Impfungen**  
Terminvergaben für Covid-19-Impfungen für über 80-Jährige sind seit Ende Dezember möglich. Die Verfügbarkeit des Impfstoffs zu Beginn ist sehr begrenzt. [Webseite Sozialministerium](#)

### Beratungshä

[www.wohlfahrtswerk.de/beratung](http://www.wohlfahrtswerk.de/beratung)  
[beratung@wohlfahrtswerk.de](mailto:beratung@wohlfahrtswerk.de)  
01573/4504000

### Bürgerheld

[www.buergerheld.de/](http://www.buergerheld.de/)  
[info@buergerheld.de](mailto:info@buergerheld.de)

### Corona Hilfeleistung

<https://corona-hilfeleistung.de/>  
[info@corona-hilfeleistung.de](mailto:info@corona-hilfeleistung.de)

### Die Stuttgarter Einkaufsfreunde - Die Global Shapers Stuttgart

<https://global-shapers-stuttgart.org/die-stuttgarter-einkaufsfreunde-wir-stuttgarter-halten-in-der-corona-krise-zusammen/>  
[koordination@global-shapers-stuttgart.org](mailto:koordination@global-shapers-stuttgart.org)  
0176/67137758





## How the city of Stuttgart supports Covid initiatives (2/2)

The city of Stuttgart published a website with relevant information concerning Covid-19

Besides the general public, they focus on the following target groups:

3. Private/public organizations: information, consulting and support for community support organizations
  - Safety and hygiene
  - Payment of purchases
  - Data protection
  - Accountability and insurances
  - Technical tools e.g. they offer a chatbot
  - Financial support and how to deal with donations
  - Networking
  - Public relations

→ For us, it was very valuable to cross-check our processes and guidelines with the recommendations of the city esp. concerning safety, payment and data protection

### Vielen Dank für Ihr Engagement!

Die Corona-Pandemie ist nicht überwunden. Aktuell ist eine zunehmende Beschleunigung der Übertragungen in der Bevölkerung in Deutschland zu beobachten. Der Infektionsschutz hat damit neue Aktualität erreicht. Die Sommermonate mit geringeren Infektionszahlen hatten dessen große Dringlichkeit etwas in den Hintergrund gerückt.

Schon im Frühjahr war es großartig zu sehen, wie solidarisch sich die Stuttgarterinnen und Stuttgarter dieser großen Herausforderung gestellt haben. Bürgerschaftliches Engagement in Stuttgart ist eine tragende Säule der Stadtgesellschaft. Die große Stärke der Stuttgarterinnen und Stuttgarter ist die Fähigkeit, eigeninitiativ zu handeln und sich selbst zu organisieren. Dieses Engagement ist angesichts der aktuellen Situation wieder besonders gefragt. Es erreichen uns inzwischen erneut viele Anrufe von engagierten Bürgerinnen und Bürgern mit ganz unterschiedlichen Anliegen. Vielen Dank für Ihre Unterstützung!

HILFSANGEBOTE

INFORMATION & BERATUNG

NEUE ENGAGEMENTFORMEN

SOLIDARISCHES HANDELN

### Information für Anbieter

- + Gesundheitsschutz
- + Schutz vor Betrug
- + Bezahlung von Einkäufen und Botengängen
- + Datenschutz
- + Haftung und Versicherung
- + Öffentlichkeitsarbeit
- + Gegenseitige Unterstützung und Vernetzung
- + Technische Tools
- + Finanzielle Unterstützung und Umgang mit Spenden

THANK



YOU



# Informal Discussion Round



 **University of Stuttgart**  
Institute for Human Factors and  
Technology Management IAT

 **Fraunhofer**

Supported by:



based on a decision of the German Bundestag

## The MGI Webinar Series (tentative schedule)

- 🌐 Linking COVID-19 response to climate action (January 2021)
- 🌐 Smart city policies (March 2021)
- 🌐 Integrated planning for resilient cities – tools and approaches (May/June 2021)
- 🌐 Adapting to climate change – urban water management (October 2021)
- 🌐 Ecosystem services and nature-based solutions (December 2021)
- 🌐 Climate mitigation in the mobility sector (February 2022)
- 🌐 Smart city finance & procurement (April/May 2022)

**Contact:** Sophie Mok (sophie.mok@iao.fraunhofer.de)

### Stay updated!



<http://www.mgi-iki.com/>



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